

# Work Order ID 85173

**\*85173\***

Page 1

June-04-12 10:24:21 AM

Item ID: D3391-023  
Revision ID:  
Item Name: Mid Tube Assembly

Accept

**\*N900040100\***

Setup Start **\*NS1\***  
Stop **\*NS2\***

Start Date: 04/06/2012 Start Qty: 1.00 **\*1\***  
Required Date: 18/06/2012 Req'd Qty: 1.00 **\*1\***

Cust Item ID:  
Customer:

Reference:

Approvals: Process Plan: MLJ Date: 12/06/04 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***  
Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	I								

100

0.00

**\*100\***

Skidtubes

0.00

Skidtubes  
Skidtubes

Memo

~~/~~ Cut tube to finish length as per Dwg D3391

~~/~~ Drill pilot holes using DT8796 (Do not drill "B" holes) and drill only 1 fwd saddle hole on one side only as per Dwg D3391

~~/~~ Open saddles and GHW holes to Ø0.375" except for fwd saddle hole of detail "J"

~~/~~ Remove .030" from Fwd indexing Ridge as per Dwg D3391

~~/~~ Remove indexing ridge on Fwd & Aft end of skidtube as per Dwg D3391

~~/~~ Deburr

~~/~~ Drill #30 pilot holes using wearplate Jig DT8217 Identify Ø0.250" holes with paint marker,  
\*\*\*DO NOT DRILL HOLES #3-19-20 FROM FWD END OF JIG

~~/~~ Open wearplate holes of D3391-023 assembly detail section G-G to Ø0.250" (10 holes) as per Dwg D3391

~~/~~ Open wearplate holes of D3391-023 assembly detail section H-H to Ø0.297" (20 holes) as per Dwg D3391  
\*\*\*DO NOT OPEN 2 MOST FWD WEARPLATE HOLES\*\*\*

CF 12-8-1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Setup Start **\*NS1\***

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Start Date: 04/06/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start **\*NR1\***

QC: Date: SPC (Y/N): Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	<del>10</del> Open .375" holes to .438" ***do not open fwd saddle holes***								
	<del>11</del> Locate D3391-021 in D3391-023 at 9.00" (see view z-z)								
	<del>12</del> Transfer drill one fwd saddle hole only to .188" dia, transfer drill all remaining fwd saddle holes using DT 8149 locating from previously drill .188" dia hole, using t-pins and clicos to ensure perfect allingment, open up previously tranfer drilled pilot holes in D3391-023/-021 to 0.438" dia. in D3391-021								
	<del>13</del> Using DT8217, locating from two previously drilled holes, drill remaining wearplate holes into D3391-021.								
	<del>14</del> Locating from two fwd wearplate holes in D3391-023 drill remaining 6 wearplate holes in D3391-021 using DT8937								
	<del>15</del> Open 12 wearplate holes in D3391-021 to 0.297" dia.								
	<del>16</del> Deburr and blow out all chips from inside tube, scribe batch # in D3391-023 at aft end.								

CF 12.8.3

110

QC5- Inspect part completeness to step on W/O

0.00

**\*110\***

QC

Memo

0.00

Quality Control

DAS 16 2-8 12/06/03

W/O:		WORK ORDER CHANGES					
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Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

Chemical Conversion Coat per QSI005 4.1

0.00

**\*120\***

HandFinish

Memo

0.00

Hand Finishing

1 76 12-8-7

130

QC7-Inspect Chemical Conversion Coat

0.00

**\*130\***

QC

Memo

0.00

Quality Control

1 3 12/08/08

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start **\*NR1\***

QC: Date: SPC (Y/N): Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

140

0.00

**\*140\***

Skidtubes

Skidtubes

Memo

0.00

1-Open float bag holes as per dwg  
2-C'sink float bag holes as per dwg  
3- Prepare tube for welding  
4-Bond web in place as per Dwg D3391 & QSI 015.  
Adhere for 12 hours)

A/R Sikaflex exp: M/22/30

batch#: 13-3-14

NOTE:ENSURE WEB IS INSERTED IN AFT END OF TUBE

*> - Dec 12/08/08*

*- Dec 12/08/08*

150

QC5- Inspect part completeness to step on W/O

0.00

**\*150\***

QC

Memo

0.00

Quality Control

*1 2 12/08/13*

**DAS**  
**18**  
**9-09**

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**Dart Aerospace Ltd**

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**\*1\***

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Required Date: 18/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

185

Pressure Wash per QSI005 4.3

0.00

**\*185\***

HandFinish

Memo

0.00

Hand Finishing

AND REALODINE AS PER PAR09-043

1 12-8-23

190

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

**\*190\***

Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

8:40  
320 OF  
9:10

1X 12/08/23

200

QC3- Inspect Part Finish

0.00

**\*200\***

QC

Memo

0.00

Quality Control

1X 12/08/23

m121841

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Start Date: 04/06/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

210

**\*210\***

Skidtubes

Skidtubes

Skidtubes

Memo

1- insert D3391-021 into D3391-23

2- insert T-pins into first and third fwd saddle holes

3- ON FIRST SIDE ONLY drill out 2nd and forth fwd saddles holes to 0.500" as per DSI 9364

4- remove T-pins and locate DT9415 from first and third crossbolt hole using T-pins and clekos

5- ON 2ND SIDE ONLY ream out 2nd and forth saddle hole to 0.499". Remove DT9415

6- deburr, re-alodine and blow out chips

7- press fit D3591-1 spacers using DT9416 starting from 0.500" side

0.00

0.00

0.00

0.00

DAS

16

17/06/12

1 x f. Ill 17/06/12

220

**\*220\***

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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June-04-12 10:24:21 AM

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Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Mid Tube Assembly

Start Date: 04/06/2012 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: Date:

Tooling: Date:

Run Start **\*NR1\***

QC: Date:

SPC (Y/N): Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	HandFinishing	0.00							
<b>*230*</b>									
HandFinish	Memo	0.00							
Hand Finishing	✓ Install Inserts as per Dwg								
240	QC5- Inspect part completeness to step on W/O	0.00							
<b>*240*</b>									
QC	Memo	0.00							
Quality Control									
250	Identify as per dwg & Stock Location <u>W/O</u>	0.00							
<b>*250*</b>									
Packaging	Memo	0.00							
Packaging									

**DAS**  
**16**  
**9-5** 12/05/12

10412-742-043/B87071

12/05/12

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



**Work Order ID 85173****\*85173\***

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**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Mid Tube Assembly

Start Date: 04/06/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 18/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

260

QC21- Final Inspection - Work Order Release

0.00

**\*260\***

QC

Memo

0.00

Quality Control

OK 12/8/28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

June-04-12 10:24:24 AM

Page 1

Work Order ID: 85173

**\*85173\***

Parent Item: D3391-023

**\*D3391-023\***

Parent Item Name: Mid Tube Assembly

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP A05.10.20 New Issue KJ/EC  
 IPP B06.02.10 ECN 773 dwg rev.D EC  
 IPP C 07.03.20 rev F dwg EC  
 IPP D 07.03.28 re-format EC  
 IPP E 07.10.31 ecn 1053P EC  
 IPP Rev:F ECN 1056 07-11-13 DD verified by: EC  
 IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC  
 IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC  
 IPP Rev:I 08-11-13 Removed steps per w/o, QC KJ verified by: ec IPP  
 Rev:J add in seq 140 expire date & b# sikaflex DD 10.02.17 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2500-1-100		Manufactured	No			100	Each	82.0000	1	1			

**\*D2500-1-100\***

Skidtube Extrusion

\*\*

CF 12-81

Location	Loc Qty	Loc Code
HALL	82	
50251	9	
82373	73	

D3391-021

Manufactured No

100

Each

0.0000

1

1

**\*D3391-021\***

Fwd Tube Assembly

\*\*

C

CF 12-8-3

D3389-1

Manufactured No

140

Each

10.0000

1

1

**\*D3389-1\***

Web

\*\*

DC 12/08/08

Location	Loc Qty	Loc Code
LG	10	
83848	4	
83849	6	

B85589

①

**Dart Aerospace Ltd**

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\*85173\*

\*D3391-023\*

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3681-1

Manufactured No

160

Each

87.0000

5

5

\*D3681-1\*

Spacer

\*\*

BE 2/08/13  
8854/7 x5

Location

Loc Qty

Loc Code

LG

77

80361

1

84053

76

LG001

10

68958

2

69893

2

71845

2

74874

1

76004

1

77501

2

D3591-1

Manufactured No

210

Each

96.0000

2

2

\*D3591-1\*

Bushing

\*\*

HL 12/08/27

Location

Loc Qty

Loc Code

FP

5

80377

4

82027

1

ST055

91

57350

1

83237

90

x2

W/O:		WORK ORDER CHANGES					
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\*85173\*

\*D3391-023\*

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3

Start Date: 04/06/2012

Required Date: 18/06/2012

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

Purchased

No

230

Each

2,457.000

20

20

\*AI S4-1032-130\*

Insert

\*\*

HL - W/08/07

## Location

## Loc Qty

## Loc Code

ST280

205

119084

116

120671

89

ST281

74

120807

36

120837

38

ST282

2178

121269

2178

M 122474 ~~x20~~  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

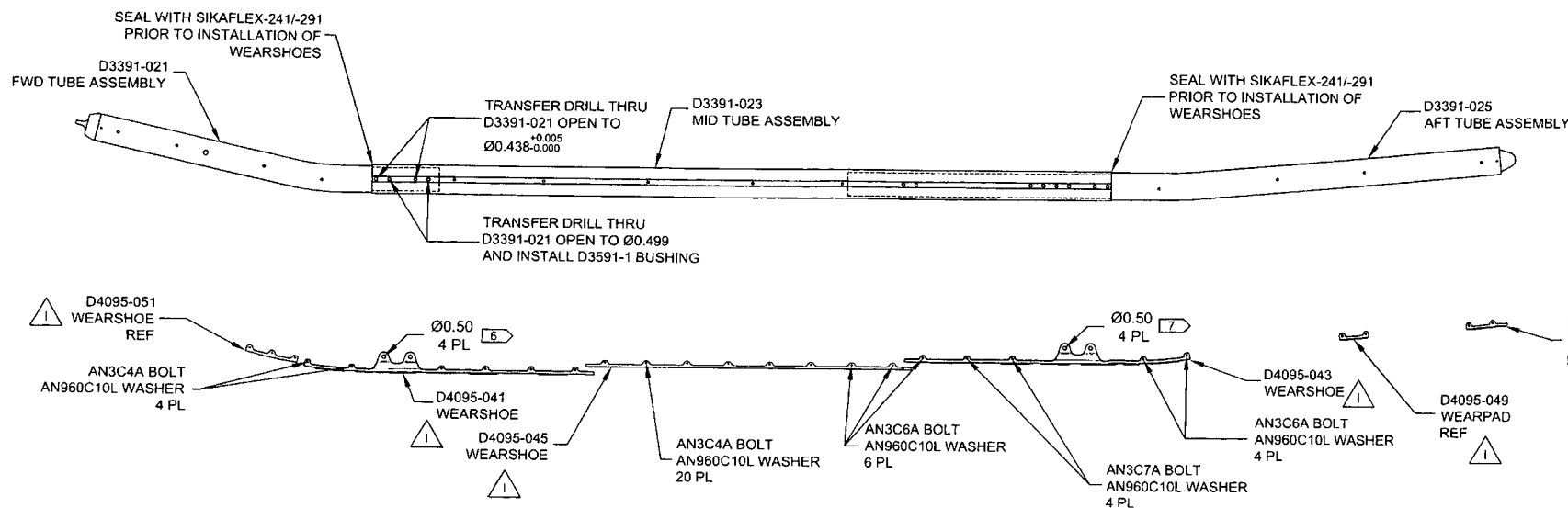
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

85173



# **D3391-043 ASSEMBLY**

## **D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST**

QTY -043	PART NUMBER	DESCRIPTION
X	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
2	D3591-1	BUSHING
1	D4095-041	WEARSHOE
1	D4095-043	WEARSHOE
1	D4095-045	WEARSHOE
1	D4095-047	WEARSHOE
1	D4095-049	WEARSHOE
1	D4095-051	WEARSHOE
24	AN3C4A	BOLT
10	AN3C6A	BOLT
4	AN3C7A	BOLT
38	AN960C10L	WASHER

## **GENERAL NOTES**

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON"
- 3) AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.
- 7) FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-041
- 8) FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-043

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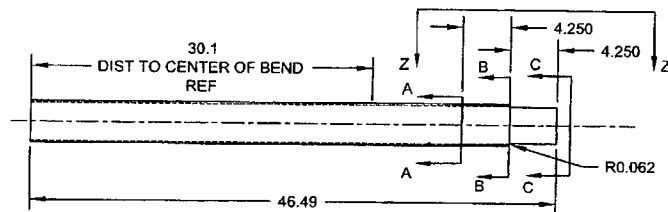
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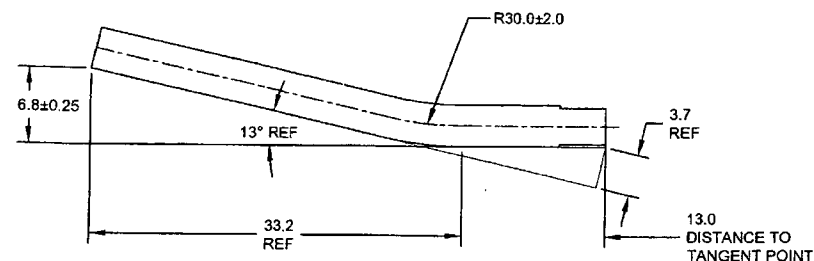
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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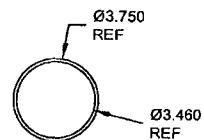
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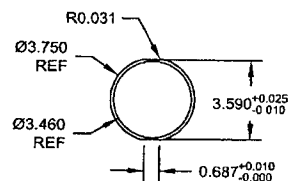
**D3391-1 CUTTING DETAIL**  
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



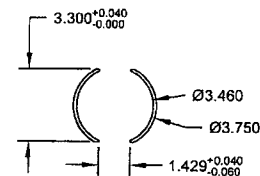
**D3391-011/-021 BENDING DETAIL**  
(MAKE FROM D3391-1)



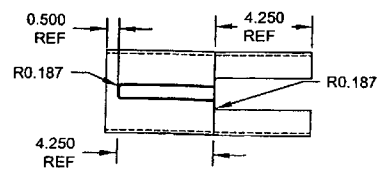
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**SECTION B-B**  
SCALE 2X



**SECTION C-C**  
SCALE 2X



**VIEW Z-Z**  
SCALE 2X

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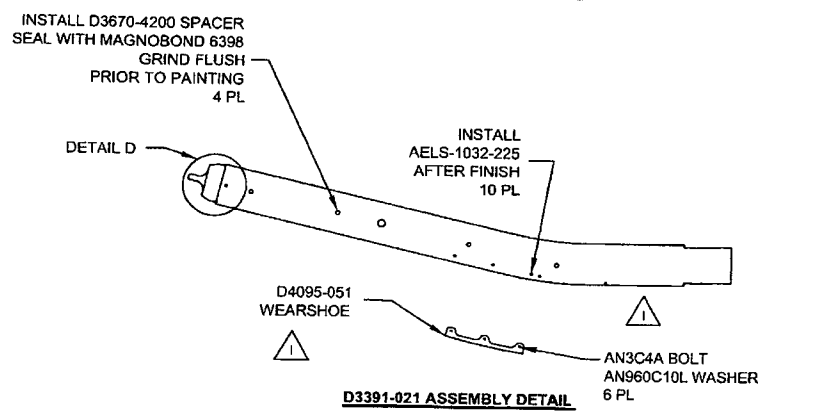
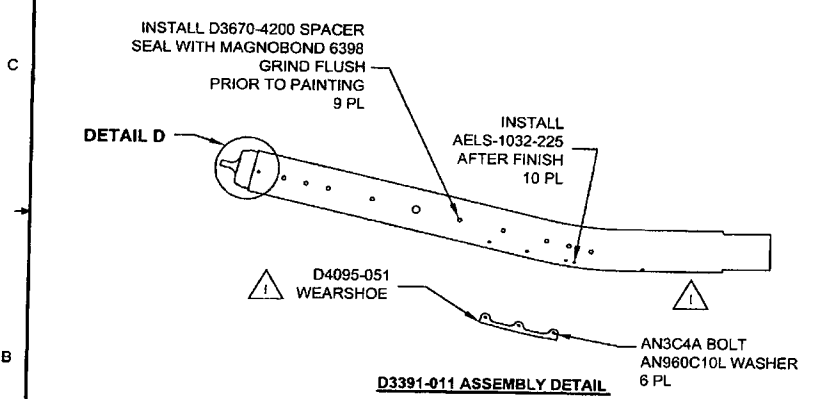
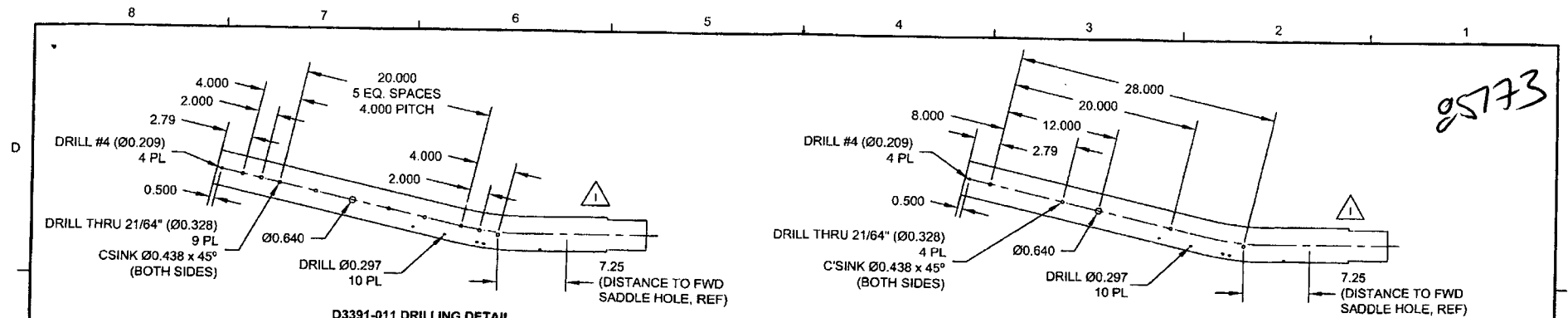
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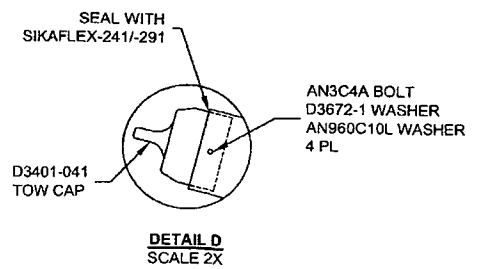
**NOTE:** Date & initial all entries

05773



D3391-011/-021 FWD TUBE ASSEMBLY PARTS LIST

QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X	X	D3391-011	FWD TUBE ASSEMBLY
		D3391-021	FWD TUBE ASSEMBLY
1	1	D3401-041	TOW CAP
9	4	D3670-4200	SPACER
4	4	D3672-1	WASHER
1	1	D4095-051	WEARSHOE
1	1	D6013-047	FWD TUBE
10	10	AN3C4A	BOLT
10	10	AN960C10L	WASHER
10	10	AELS-1032-225	INSERT



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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

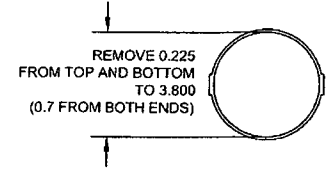
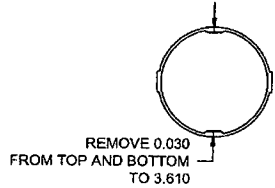
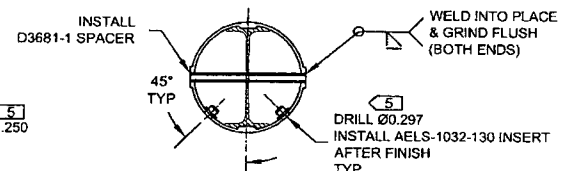
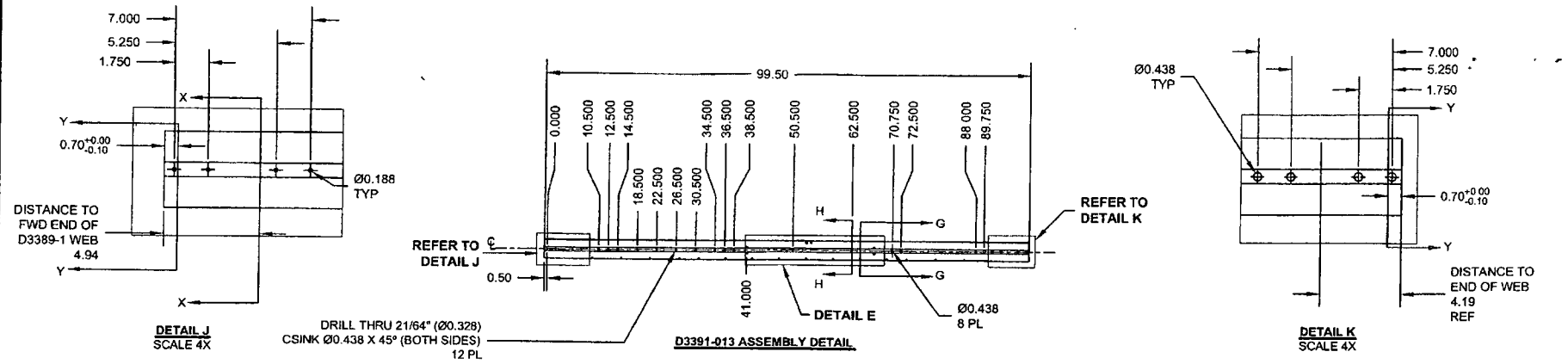
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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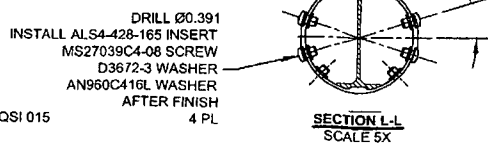
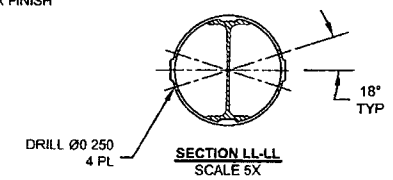
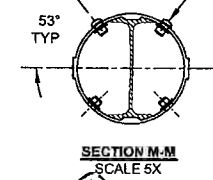
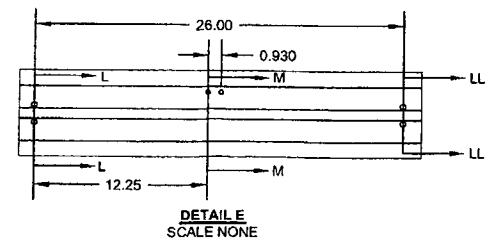


85173



**D3391-013 MID TUBE ASSEMBLY PARTS LIST**

QTY -013	PART NUMBER	DESCRIPTION
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	AN960C10L	WASHER
4	AN960C416L	WASHER
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW



- D3391-013 MID TUBE ASSEMBLY**
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
  - 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
  - 3) WELDING: PER DART QSI 004

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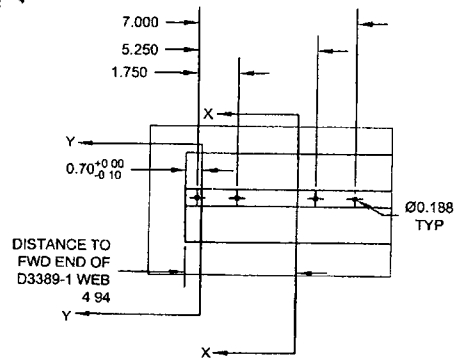
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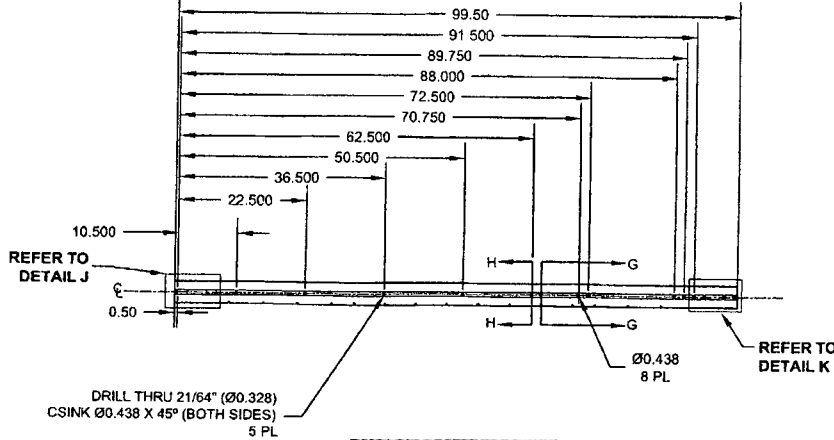
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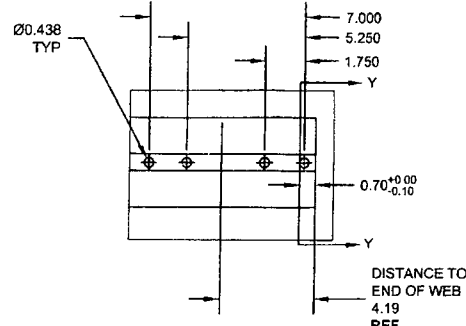
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DETAIL J  
SCALE 4X



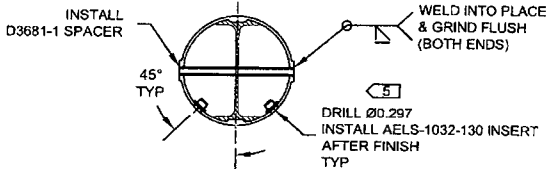
D3391-023 ASSEMBLY DETAIL



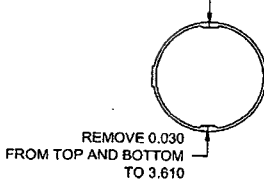
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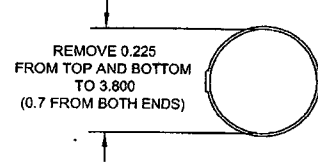
SECTION G-G  
SCALE 5X



SECTION H-H  
SCALE 5X



SECTION X-X  
SCALE 5X



SECTION Y-Y  
SCALE 5X

D3391-023 MID TUBE ASSEMBLY PARTS LIST

QTY - 023	PART NUMBER	DESCRIPTION
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

D3391-023 MID TUBE ASSEMBLY

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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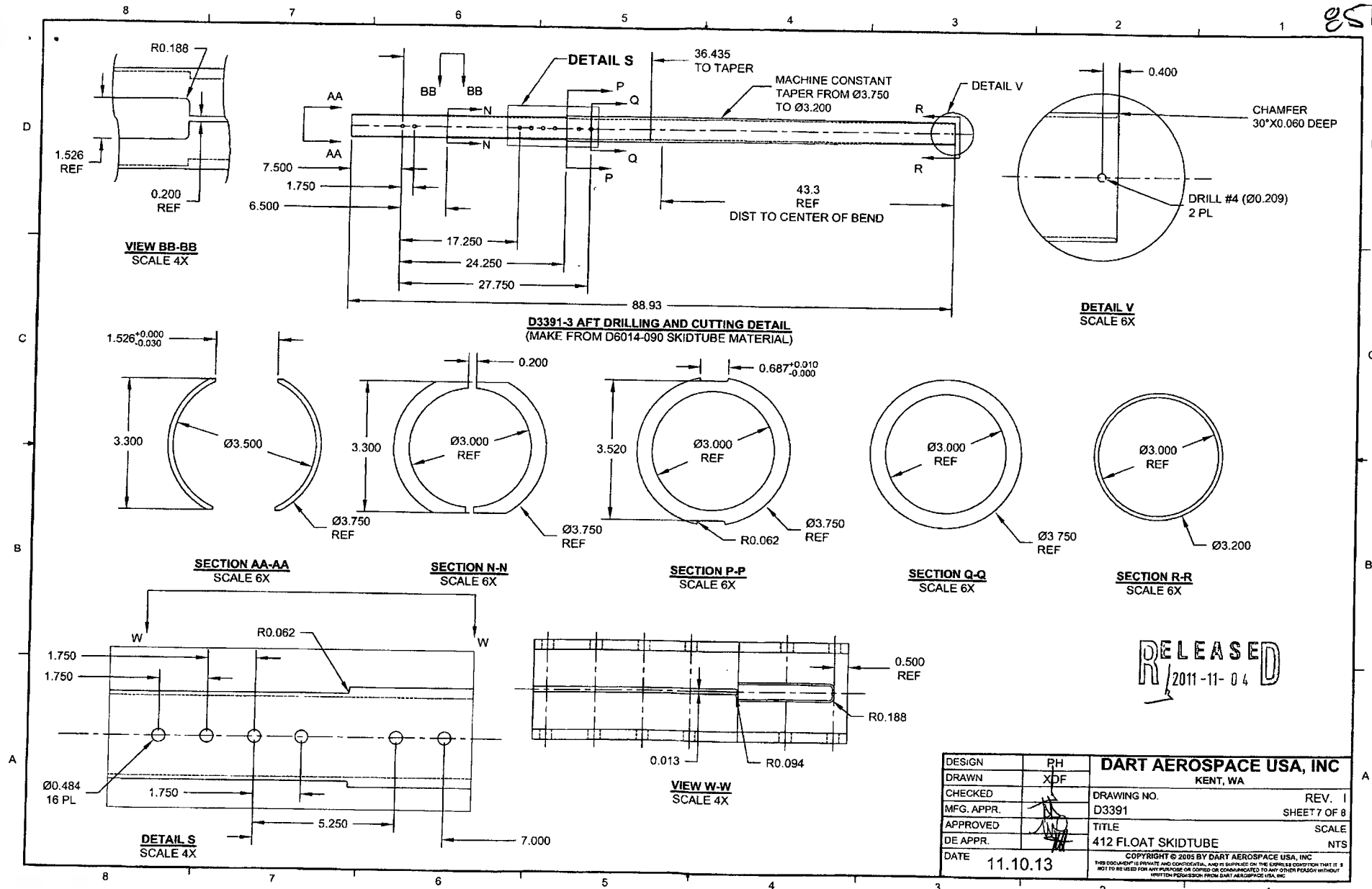
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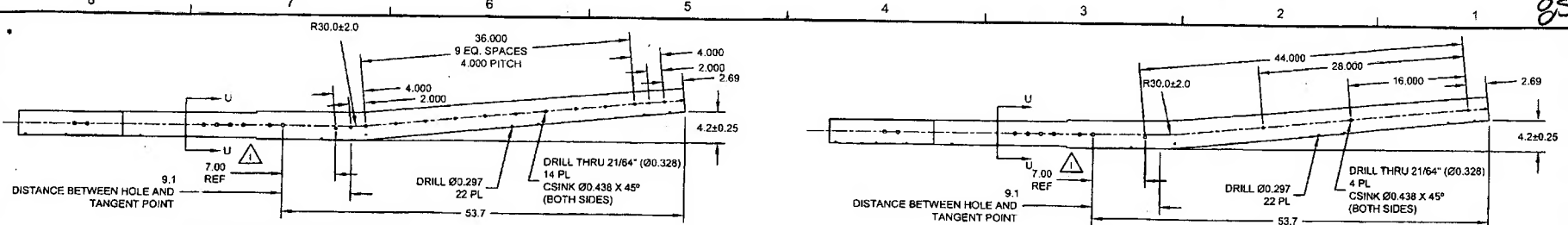
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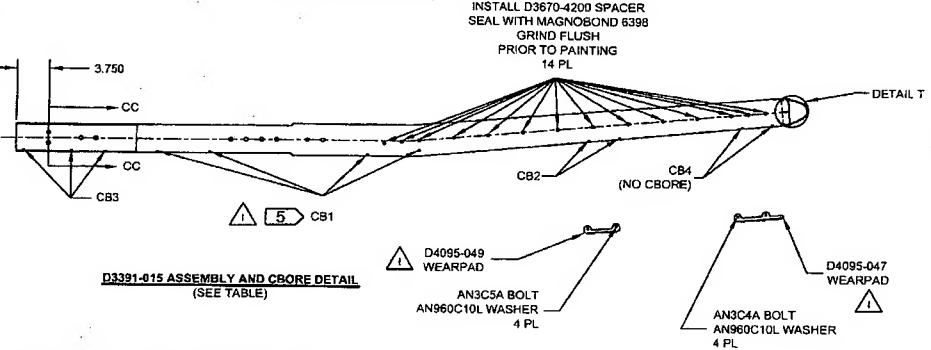
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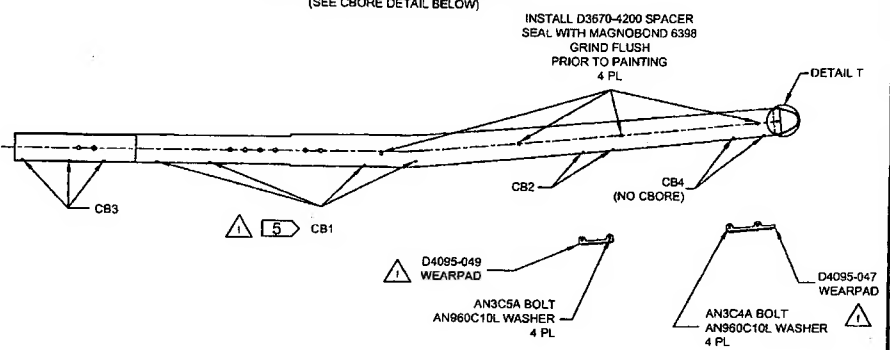


**D3391-015 BENDING AND DRILLING DETAIL**  
(SEE CBORE DETAIL BELOW)

**D3391-025 BENDING AND DRILLING DETAIL**  
(SEE CBORE DETAIL BELOW)



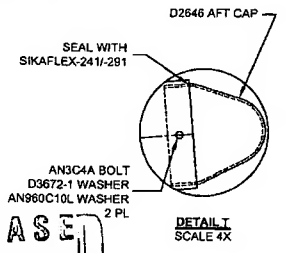
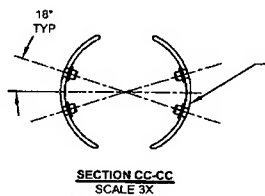
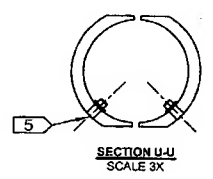
**D3391-015 ASSEMBLY AND CBORE DETAIL**  
(SEE TABLE)



**D3391-025 ASSEMBLY AND CBORE DETAIL**  
(SEE TABLE)

**D3391-015/-025 AFT TUBE ASSEMBLY PARTS LIST**

QTY - 015	QTY - 025	PART NUMBER	DESCRIPTION
X	X	D3391-015	AFT TUBE ASSEMBLY
		D3391-025	AFT TUBE ASSEMBLY
1	1	D2646	AFT CAP
14	4	D3670-4200	SPACER
2	2	D3672-1	WASHER
1	1	D4095-049	WEARPAD
1	1	D4095-047	WEARPAD
1	1	D8014-090	AFT TUBE
14	14	AELS-1032-130	INSERT
6	8	AELS-1032-225	INSERT
4	4	ALS4-428-165	INSERT
6	6	AN3C4A	BOLT
4	4	AN3C5A	BOLT
10	10	AN960C10L	WASHER



DRILL Ø0.391  
CBORE Ø0.516 X 0.040 DEEP  
INSTALL ALS4-428-165 INSERT  
4 PL

**RELEASED**  
2011-11-04

CBORE HOLES MARKED CB1-CB4 AS FOLLOWS AND  
INSTALL AELS-1032-XXX AFTER FINISH AS NOTED

HOLES MARKED	QTY D3391-015	QTY D3391-025	CBORE	P/N
CB1	8	8	Ø0.430 X 0.170	AELS-1032-225
CB2	4	4	Ø0.430 X 0.170	AELS-1032-130
CB3	6	6	Ø0.430 X 0.040	AELS-1032-130
CB4	4	4	NONE	AELS-1032-130

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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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NO. 296

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Berclay Elliott  
Job number: 85161  
Part number: A3391-023  
Description: Skid  
Welding Process: Tig[☒] Mig[ ]  
Base material: Alum  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[ ]  
Penetration: pass[☒] fail[ ]

UNACCEPTABLE

Cracks: pass[☒] fail[ ]  
Undercut: pass[☒] fail[ ]  
Pin holes: pass[☒] fail[ ]  
Overlap (cold lap): pass[☒] fail[ ]  
Porosity (surface): pass[☒] fail[ ]  
Coloration: pass[☒] fail[ ]

Qualifier David Lloyd Date of Test Coupon 12-06-07  
Welder Berclay Elliott Date of Test Coupon 12-06-07

The above named individual is qualified in accordance with AWS D17.1.2001 to weld